



TANGO
Device
Server

Multi Channel Analyzer User's Guide

MCA Class

**Revision: - Author: tere29
Implemented in C++**

Introduction:

Abstract Class for a Multi Channel Analyzer

Class Inheritance:

- Tango::Device_4Impl
 - MCA

Properties:

Device Properties		
Property name	Property type	Description
MaxDataLength	Tango::DEV_LONG	Maximum number of channels in the data spectrum

Device Properties Default Values:

Property Name	Default Values
MaxDataLength	No default value

There is no Class properties.

States:

States	
Names	Descriptions
ON	No problems in device

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
DataLength	DEV_LONG	READ_WRITE	No

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
Data	DEV_LONG	10000	No

Commands:

More Details on commands....

Device Commands for Operator Level		
Command name	Argument In	Argument Out
Init	DEV_VOID	DEV_VOID
State	DEV_VOID	DEV_STATE
Status	DEV_VOID	CONST_DEV_STRING
Start	DEV_VOID	DEV_LONG
Stop	DEV_VOID	DEV_LONG
Read	DEV_VOID	DEV_LONG

1 - Init

- **Description:** This commands re-initialise a device keeping the same network connection. After an Init command executed on a device, it is not necessary for client to re-connect to the device. This command first calls the device *delete_device()* method and then execute its *init_device()* method. For C++ device server, all the memory allocated in the *nit_device()* method must be freed in the *delete_device()* method. The language device destructor automatically calls the *delete_device()* method.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_VOID : none.
- **Command allowed for:**
 - Tango::ON

2 - State

- **Description:** This command gets the device state (stored in its *device_state* data member) and returns it to the caller.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_STATE : State Code

- **Command allowed for:**

- Tango::ON

3 - Status

- **Description:** This command gets the device status (stored in its *device_status* data member) and returns it to the caller.

- **Argin:**

DEV_VOID : none.

- **Argout:**

CONST_DEV_STRING : Status description

- **Command allowed for:**

- Tango::ON

4 - Start

- **Description:** Start MCA

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_LONG : Completion status

- **Command allowed for:**

- Tango::ON

5 - Stop

- **Description:** Stop MCA

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_LONG : Completion status

- **Command allowed for:**

- Tango::ON

6 - Read

- **Description:** Read MCA
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_LONG : Completion status
- **Command allowed for:**
 - Tango::ON

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